

GenCore version 4.5
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OM nucleic - nucleic search, using sw model

Run on: October 28, 2000, 18:46:59 ; Search time 970.13 Seconds
(without alignments)
1796.320 Million cell updates/sec

Title: US-09-157-984-2

Perfect score: 399
Sequence: 1 aagcgcaactctcttgcga.....gccgcgaactcatgagagcat 399

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Archived: 1033670-seqs, 2183789903 residues
Total number of hits satisfying chosen parameters: 2067340

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

GenEmbl:*
1: gb_ba1:*
2: gb_ba2:*
3: gb_cm:*
4: gb_ov:*
5: gb_pat:*
6: gb_ph:*
7: gb_pl1:*
8: gb_pl2:*
9: gb_pr1:*
10: gb_pr2:*
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26: em_sts:*
27: em_sy:*
28: em_un:*
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31: gb_htg2:*
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33: gb_in2:*
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90: em_htg23:*
91: gb_pr6:*
92: gb_pr7:*
93: gb_sts1:*
94: gb_sts2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	399	100.0	519	4 CCU94949	U94949 Cyprinus ca
2	328.6	82.4	1218	4 AF055906	AF055906 Danio rer
3	128.2	32.4	1429	4 XIPNE6G	XIPNE6G Xiphophorus
4	129.2	32.4	1429	4 XIPNE6R	XIPNE6R Xiphophorus
5	129.2	32.4	1429	5 A46744	A46744 Sequence 1
6	127.6	32.0	1700	4 XIPNRTN6A	XIPNRTN6A Xiphophorus
7	127.6	32.0	2273	5 A46746	A46746 Sequence 3
8	123.6	31.0	720	4 XMNGFNA	XMNGFNA X. maculatus
9	103.8	26.0	763	3 PTGNGFB	PTGNGFB L31898 Pig nerve g
10	99.6	25.0	1123	12 M0SGFN4	M0SGFN4 M1298 Mouse nerve
11	99.6	25.0	1176	12 XMNGF1	XMNGF1 V00836 Mouse mRNA
12	99.6	25.0	1176	12 M0SNGF	M0SNGF M35075 Mouse nerve

```

13 98 24.6 378 3 BOVNGFA
14 98 24.6 1164 12 MUSNGFB
15 98 24.6 1164 12 MUSNGFB
16 96.4 24.2 1682 12 RATNGFB
17 94.2 23.6 769 9 AB037520
18 93.2 23.4 693 3 BTNGFB
19 93.2 23.4 1169 12 PYXNGFSEBQ
20 92.4 23.2 1038 12 S62XNGF
21 89.4 22.4 725 5 I36342
22 89.4 22.4 725 11 AF150960
23 89.4 22.4 769 9 AB037517
24 89.4 22.4 769 9 AB037518
25 89.4 22.4 972 5 E02939
26 89.4 22.4 972 5 E02982
27 89.4 22.4 972 5 E03015
28 89.4 22.4 972 5 E03037
29 89.4 22.4 972 5 E03589
30 89.4 22.4 972 5 E05802
31 89.4 22.4 972 5 E08424
32 89.4 22.4 1047 91 HSBNGFAC
33 89.4 22.4 4044 5 E00327
34 89.4 22.4 5778 92 H0MNGFBA2
35 89.4 22.4 11594 91 HSBNGF
36 89.4 22.4 116520 91 HSB6282
37 87.8 22.0 769 9 AB037519
38 87.4 21.9 389 5 I36343
39 86 21.6 372 4 CHKNGFC
40 86 21.6 542 4 CHKNGFBA
41 85.2 21.4 342 4 GGNGB
42 84.6 21.2 354 5 A68467
43 84.6 21.2 354 9 S76884
44 84.6 21.2 388 5 E02940
45 84.4 21.2 1156 4 GGNGB3E

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ALIGNMENTS

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M26809 Bovine nerv
K01759 Mouse beta-
M14805 Mouse nerve
M36589 Rat beta-ne
AB037520 Pongo pyg
Y09566 B. taurus ge
M22748 P. taurus nat
S62089 Mus sp. ner
I36342 Sequence 2
AF150960 Homo sapi
AB037517 Homo sapi
AB037518 Pan trogl
E02939 DNA sequenc
E02982 DNA encodin
E03015 DNA encodin
E03037 DNA encodin
E03589 DNA encodin
E05802 Human NGF g
E08424 Genomic DNA
X5259 Human mRNA
E00327 DNA coding
M21062 Human nerve
V01511 H. sapiens g
AL049825 Human DNA
AB037519 Gorilla g
I36343 Sequence 5
M26810 Chicken ner
D00010 Gallus gall
X04067 Chicken bet
A68467 Sequence 4
S76884 Homo sapien
E02940 Synthetic D
X04003 Chicken bet

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RESULT 1
LOCUS CCU94949 519 bp DNA VRT 06-JUL-1998
DEFINITION Cyprinus carpio NGF/NT-6-like neurotrophin (NNT) gene, partial cds.
ACCESSION U94949
VERSION U94949.1 GI:3290009
KEYWORDS
SOURCE common carp.
ORGANISM Cyprinus carpio
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Ostariophysi;
Cypriniformes; Cyprinidae; Cyprininae; Cyprinus.
REFERENCE
1 (bases 1 to 519)
Lai, K.O., Fu, W.Y., Ip, F.C. and Ip, N.Y.
Cloning and expression of a novel neurotrophin, NT-7, from carp
Mol. Cell. Neurosci. 11 (1-2), 64-76 (1998)
JOURNAL 98271461
MEDLINE 2 (bases 1 to 519)
Lai, K.O., Fu, W.Y., Ip, F.C. and Ip, N.Y.
Direct Submission
Submitted (24-MAR-1997) Biology, The Hong Kong University of
Science and Technology, Clear Water Bay, Kowloon, Hong Kong
LOCATION/Qualifiers
1. 519
/organism="Cyprinus carpio"
/db_xref="taxon:7962"
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/translation="PGPRVRKANDFLHREGEYVCDSEEHVGNLTQATDLRGNEVTV

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RESULT 2
LOCUS AF055906 1218 bp DNA VRT 13-APR-1998
DEFINITION Danio rerio neurotrophin-7 gene, complete cds.
ACCESSION AF055906
VERSION AF055906.1 GI:3044090
KEYWORDS
SOURCE zebrafish.
ORGANISM Danio rerio
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Ostariophysi;
Cypriniformes; Cyprinidae; Rasbora; Danio.
REFERENCE
1 (bases 1 to 1218)
Nilsson, A.-S., Fainzilber, M., Falck, P. and Ibanez, C.F.
Neurotrophin-7: a novel member of the neurotrophin family from the
zebrafish
FEBS Lett. 424 (3), 285-290 (1998)
JOURNAL 98198571
MEDLINE 2 (bases 1 to 1218)
Nilsson, A.-S., Fainzilber, M., Falck, P. and Ibanez, C.F.
Direct Submission
Submitted (27-MAR-1998) Neuroscience, Karolinska Institute,
Doktorstrangen 12, Stockholm 17177, Sweden
LOCATION/Qualifiers
1. 1218
/organism="Danio rerio"
/db_xref="taxon:7955"
<348. >1049
/product="neurotrophin-7"
348.1049
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subfamily member; NT-7"
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Query Match 100.0%; Score 399; DB 4; Length 519;
Best Local Similarity 100.0%; Pred. No. 2.5e-93;
Matches 399; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 664 CCCACCCAGCTCTTCCACAGTGGGGAGTCTTCACTGTGTGACAGTGTCTGCGTTG 723

QY 65 gcaacctgacccaagccacagacttaacgaggaatgaagcagcgtgctgcacatgttc 124

DB 724 GAGATTAAGACACAGCCACAGCATCAAGGGCAAGGAGTGTGACAGTGTGCGCAGGTGA 783

QY 125 gcatcaacaacgtggtgaagaagcagatgttctcagagaccagcgtgctgtcgaagc 184

DB 784 ACATTAACAACAGTGTATTCAGACAGTACTTTTGTGAGACCAAGTGTGCGCAGCTTCAATC 843

QY 185 ccatcgggggcccaagccggtcaagagatcagcggcgttaagcaggaacctatagct 244

DB 844 CTGTGTAGAG-----TGGGT 858

QY 245 gtctggtgacgaacaagcagcagcactgttaatttcacacaagcgtgacaccttctgc 304

DB 859 GCCGGGGCATGCACTCCAAACACTGGAACCTACTGTGACACGACGACTACACCTTCGTCA 918

QY 305 gggcggttaacgtctctacaacaaacagatgctcgtgaggttcacccgaatcaagcgcgtt 364

DB 919 AGCGGTGACAAAGATGAGAGAGAGAGCTGCTGAGAGTTCATCGGATGAGACAGCCT 978

QY 365 gctgtgctctcctcagccgca 386

DB 979 GTGTGTGTGTCTCAGCAGGAA 1000

RESULT 12

MUSNGF 1176 bp mRNA ROD 27-APR-1993

LOCUS Mouse nerve growth factor (NGF) precursor mRNA, complete cds.

DEFINITION M35075 J00608

ACCESSION M35075.1 GI:200047

VERSION 1

KEYWORDS nerve growth factor.

SOURCE Mus musculus male submaxillary gland cDNA to mRNA.

ORGANISM Mus musculus

REFERENCE 1 (bases 1 to 1176)

AUTHORS Scott,J., Selby,M., Urdea,M., Quiroga,M., Bell,G.I. and Rutter,W.J.

TITLE Isolation and nucleotide sequence of a cDNA encoding the precursor of mouse nerve growth factor

JOURNAL Nature 302, 538-540 (1983)

MEDLINE 83167518

REFERENCE 2 (bases 3 to 226)

AUTHORS Edwards,R.H., Selby,M.J. and Rutter,W.J.

TITLE Differential RNA splicing predicts two distinct nerve growth factor precursors

JOURNAL Nature 319, 784-787 (1986)

MEDLINE 86146860

FEATURES

source

Location/Qualifiers

1..1176

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/db_xref="taxon:10090"

/dev_stage="male"

/tissue_type="submaxillary gland"

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/gene="NGF"

1..1176

/gene="NGF"

95..656

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96..1019

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/partial

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/product="nerve growth factor"

/protein_id="AAA39818.1"

/db_xref="GI:387494"

/translation="MCIKPKYKLSLVGHGQHGQGVLAGRAVAGAGMAGPKLTSVS

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WTKIQLSLDRLARRASPTAPLAAVATGGRTRITVDPRLTKRRIRHSRVILFSTQPP

PTSSDIDLDFQAHGTLIPNTRHSKRSSTHPVHMESESVCDSSVAVWGDKTATIDI

mat_peptide

BASE COUNT 283 a 330 c 295 g 268 t

ORIGIN

Query Match 25.0%; Score 99.6; DB 12; Length 1176;

Best Local Similarity 58.4%; Pred. No. 1.1e-15;

Matches 223; Conservative 0; Mismatches 114; Indels 45; Gaps 1;

QY 5 ccaacgactcttgcacgcgcgcagactcgtgtgtgtacagcgaagcagcagcgtgtg 64

DB 664 CCCACCCAGCTCTTCCACAGTGGGGAGTCTTCACTGTGTGACAGTGTCTGCGTTG 723

QY 65 gcaacctgacccaagccacagacttaacgaggaatgaagcagcgtgctgcacatgttc 124

DB 724 GAGATTAAGACACAGCCACAGCATCAAGGGCAAGGAGTGTGACAGTGTGCGCAGGTGA 783

QY 125 gcatcaacaacgtggtgaagaagcagatgttctcagagaccagcgtgctgtcgaagc 184

DB 784 ACATTAACAACAGTGTATTCAGACAGTACTTTTGTGAGACCAAGTGTGCGCAGCTTCAATC 843

QY 185 ccatcgggggcccaagccggtcaagagatcagcggcgttaagcaggaacctatagct 244

DB 844 CTGTGTAGAG-----TGGGT 858

QY 245 gtctggtgacgaacaagcagcagcactgttaatttcacacaagcgtgacaccttctgc 304

DB 859 GCCGGGGCATGCACTCCAAACACTGGAACCTACTGTGACACGACGACTACACCTTCGTCA 918

QY 305 gggcggttaacgtctctacaacaaacagatgctcgtgaggttcacccgaatcaagcgcgtt 364

DB 919 AGCGGTGACAAAGATGAGAGAGAGAGCTGCTGAGAGTTCATCGGATGAGACAGCCT 978

QY 365 gctgtgctctcctcagccgca 386

DB 979 GTGTGTGTGTCTCAGCAGGAA 1000

RESULT 13

BOVNGFA 378 bp mRNA MAM 27-APR-1993

LOCUS Bovine nerve growth factor (NGF) mRNA, 3' end.

DEFINITION M26809

ACCESSION M26809.1 GI:163419

VERSION 1

KEYWORDS

SOURCE

ORGANISM

Bovine, cDNA to mRNA.

Bos taurus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

Bovidae; Bovinae; Bos.

1 (bases 1 to 378)

Weiler,R., Becker-Andre,M., Goetz,R., Heumann,R., Shaw,A. and

Thoenen,H.

TITLE Molecular cloning of bovine and chick nerve growth factor (NGF):

Delination of conserved and unconserved domains and their

relationship to the biological activity and antigenicity of NGF

JOURNAL EMBO J. 5, 1489-1493 (1986)

MEDLINE 86300647

FEATURES

source

Location/Qualifiers

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/gene="nerve growth factor"

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/db_xref="GI:163420"

CDS


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BASE COUNT	284	a	327	c	284	g	209	h
ORIGIN								

24.68; Score 98; DB 12; Length 1164;

Query Match	Score	DB	Length
Best Local Similarity	58.18;	Pred. No. 2.9e-15;	
Matches 222; Conservative	0;	Mismatches 115;	Indels 45; Gaps 1.

[illegible]

Search completed: October 28, 2000, 20:46:24
Job time: 7165 sec